



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,507	09/23/2004	Chia-Ling Huang	MTKP0078USA	5506
27765	7590	06/04/2007	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			TRAN, THANG V	
		ART UNIT	PAPER NUMBER	
		2627		
		NOTIFICATION DATE	DELIVERY MODE	
		06/04/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com  
Patent.admin.uspto.Rcv@naipo.com  
mis.ap.uspto@naipo.com.tw

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/711,507	HUANG, CHIA-LING	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thang V. Tran	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 March 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-12 is/are allowed.
- 6) Claim(s) 13-16 is/are rejected.
- 7) Claim(s) 17 and 18 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 September 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

An amendment dated 3/16/07 has been considered with the following results:

***Claim Objections – 37 CFR 1.75(a)***

1. Claims 13-18 are objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13:

The claim recites that “a stepping motor electrically connected to the sled for driving the sled to move the pick-up head and stopping the sled and the pick-up head when a shift distance is lower than a predetermined range”, lines 5-7; however, it is unclear from the claim as to what a shift distance is, what source generates this shift distance, and how the stepping motor recognizes when this shift distance is lower than a predetermined range so that it can stop the sled and the pick-up head.

In claim 17:

The claim recited that “a stepping motor … the target position”, lines 5-9; however, it is unclear from the claim as to what a shift distance is, what source generates this shift distance, and how the stepping motor recognizes when this shift distance is greater or lower than a predetermined range so that it can move or stop the sled and the pick-up head.

In claim 18:

The claim recited that “stopping utilizing the a stepping motor … the number of steps”, lines 8-14; however, it is unclear from the claim as to what a shift distance is, what source or step generates this shift distance, and how the stepping motor recognizes when this shift distance is greater or lower than a predetermined shift range so that it can move or stop the pick-up head. Also, the term “the shift distance”, lines 8-9, has no antecedent basis.

Claims 14-16 fall with their respective parent claim.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Lim (US 6,693,861).

Regarding claim 13, Lim, according to Figs. 3-7, discloses an optical storage system comprising: a sled inherently placed movably in the optical storage system; a pick-up head (2) placed on the sled; an object lens (see objective lens in the pick-up head 2) placed movably on the pick-up head; a stepping motor (110) electrically connected to the sled for driving the sled to move the pick-up head and stopping the sled and the pick-up head when a shift distance (deviation distance) is lower than a predetermined range (threshold range), and a control module (8, 19) electrically connected to the stepping motor, the pick-up head, and the object lens for controlling operations of the stepping motor, the pick-up head, and the object lens (see Fig. 3 and further notice that the sled and the pickup only move when the deviation exceeds the threshold range, and if the deviation remains within the threshold range, no action is performed by the motor, and inherently the sled and the pickup head is not moved when the deviation remains within the threshold range (see column 3, lines 40 to column 4, line 27)).

Regarding claims 14 and 15, see column 3, line 40 to column 4, line 23, for limitations recited in this claim.

Regarding claim 16, the step motor 110 is used to move to pickup to a predetermined initial position for performing data reproduction, column 3, lines 36-39, and such moving performed by the step motor is interpreted as short seek as recited in this claim.

***Allowable Subject Matter***

4. Claims 1-12 are allowable over the prior art of record as for the reasons provided by Applicant in the Remarks dated 3/16/07 and the reasons previously given by the examiner in the last office action dated 12/18/06.

5. Claims 17 and 18 would be allowable if rewritten or amended to overcome the objection to under 37 CFR 1.75(a), set forth in this Office action.

Claims 17 and 18 are allowable over the prior art of record because the prior art of record, considered alone or in combination, fails to suggest or fairly teach an optical storage system including a combination of: a stepping motor, electrically connected to a sled, for driving the sled to move a pick-up head if a shift distance is greater than a predetermined range and an object lens has not reached a target position, and stopping the sled and the pick-up head when the shift distance is lower than the predetermined range and the object lens has not reached the target position; and a control module electrically connected to the stepping motor, the pick-up head, and the object lens for calculating a number of steps that the stepping motor should rotate and controlling operations of the stepping motor, the pick-up head, and the object lens, as recited in claim 17; or a method for controlling a stepping motor in an optical storage system including a combination of the following steps: calculating a number of steps that a stepping motor should

rotate; moving a pick-up head toward a target position by having the stepping motor rotate according to the number of steps; moving an object lens toward a target track; stopping utilizing the stepping motor to move the pick-up head if a shift distance is lower than a predetermined shift range, while the object lens has not reached the target track, and the stepping motor has not rotated according to the number of steps; and utilizing the stepping motor to move the pick-up head if the shift distance is greater than the predetermined shift range, while the object lens has not reached the target track, and the stepping motor has not rotated according to the number of steps, as recited in claim 18.

***Response to Arguments***

6. Applicant's arguments with respect to claimed invention have been considered but are moot in view of the new ground(s) of rejection.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (571) 272-7595. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Hoa can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

Art Unit: 2627

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Thang Tran  
Primary Examiner  
Art Unit 2627